



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Department of Environmental Quality

William J. Sinclair
Acting Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

DAQE-IN0140100003-09

March 2, 2009

Christy Woodward
Denison Mines (USA) Corp.
Independence Plaza
1050 17th Street, Suite 950
Denver, CO 80265

Dear Ms. Woodward:

Re: Intent to Approve: Installation and Operation of Two Additional Diesel Generators at the Tony M. Mine, Garfield County; CDS A; Attainment Area, MACT (Part 63), Major criteria source, NESHAP (Part 61), NSPS (Part 60)
Project Number: N014010-0003

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is John Jenks, who may be reached at (801) 536-4459.

Sincerely,

Ty L. Howard, Manager
New Source Review Section

TLD:JJ:kw

cc: Southwest Utah Public Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Installation and Operation of Two
Additional Diesel Generators at the Tony M. Mine**

Prepared By: John Jenks, Engineer

Phone: (801) 536-4459

Email: jjenks@utah.gov

INTENT TO APPROVE NUMBER

DAQE-IN0140100003-09

Date: March 2, 2009

Tony M. Mine

Source Contact:

Christy Woodward, Environmental Coordinator

Phone: (303) 628-7798

**Ty L. Howard, Manager
New Source Review Section
Utah Division of Air Quality**

ABSTRACT

Denison Mines (USA) Corp. (DUSA) has reopened the Tony M underground uranium mine located on the south flank of the Henry Mountains in Garfield County. In February of 2007 DUSA was granted an AO for Phase 1 of the reopening process, which consisted primarily of reconstruction of surface facilities and developing the underground workings along existing declines. One primary diesel generator and emergency backup diesel generator were installed to provide power for the site. In addition, a second primary generator was installed to allow for routine maintenance of the first primary unit. An AO condition was included that required only one of the two primary generators to operate at one time.

Phase 2 will consist of expanding underground operations, and installing an additional primary generator to provide power for the underground and support equipment. All three primary generators will become available for use at any time. In essence this has the effect of tripling the site's emission totals.

The site's remaining emissions are a combination of fugitive dusts from haul roads, material handling and storage piles along with VOC emissions from fuel storage tanks. Diesel fuel was chosen for use in the generators as no existing local power or commercially available natural gas exists at the site.

All currently applicable federal requirements will remain in place during and after this modification. Title V of the 1990 Clean Air Act applies to this source with the requirement of submitting a Title V application within one (1) year of beginning operation of the new equipment. The site's emissions in tons per year will change as follows:

PM₁₀ +3.0; SO₂ -2.0; NO_x +165.0; CO +7.6; VOC +4.9; HAPs +0.04

These increases will result in the following potential to emit totals (all values in tons per year):

PM₁₀ 14.3; SO₂ 0.2; NO_x 248.7; CO 19.0; VOC 8.5; HAPs 0.2

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Garfield County News on March 12, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

Name of Permittee:

Denison Mines (USA) Corp.
Independence Plaza
1050 17th Street, Suite 950
Denver, CO 80265

Permitted Location:

Tony M. Mine
Henry Mountain
Garfield County, UT

UTM coordinates: 526,200 m Easting, 4,179,800 m Northing

SIC code: 1094 (Uranium-Radium-Vanadium Ores)

Section I: GENERAL PROVISIONS

- I.1 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.2 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]
- I.3 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.4 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.5 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]
- I.6 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.7 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

- II.A.1 **Tony M Mine**
Underground uranium mine and support equipment
- II.A.2 **Generator #1**
Cummins 1000 kW diesel generator
- II.A.3 **Generator #2**
Cummins 1000 kW diesel generator

II.A.4 **Generator #3**
Cummins 1000 kW diesel generator

II.A.5 **Backup Generator**
Cummins 235 kW diesel generator

II.A.6 **Fuel Storage Tanks**
Tanks for storing diesel fuel, gasoline and used oil

II.A.7 **Miscellaneous**
Miscellaneous storage and stock piles

II.B Requirements and Limitations

II.B.1 **Conditions on Permitted Source**

II.B.1.a Visible emissions from any emission point on site shall not exceed 20% opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401]

II.B.1.b Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made one-half the vehicle length or greater behind the vehicle and at approximately one-half the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value. [R307-401]

II.B.1.c All regularly traveled unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. If chemical treatment is used, it shall take place two (2) times a year, dependant on observed dust generation. If water treatment is used, watering shall be initiated daily dependant upon observed dust generation. The opacity shall not exceed 20% during all times the areas are in use or unless it is below freezing. Records of water treatment shall be kept for all periods when the mine is in operation. The records shall include the following items:

- A. Date
- B. Number of treatments made, dilution ratio, and quantity
- C. Rainfall received, if any, and approximate amount
- D. Time of day treatments were made. [R307-401]

II.B.1.d The storage piles shall be watered or chemically treated to minimize generation of fugitive dusts as dry conditions warrant or as determined necessary by the Executive Secretary. [R307-401]

- II.B.1.e The owner/operator shall use #1, #2 or a combination of #1 and #2 fuel oil as fuel in all on-site equipment. [R307-401]
- II.B.1.f Except as outlined in condition II.B.2.a below, the sulfur content of any diesel fuel burned shall not exceed 0.05 percent by weight. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary. Certification of sulfur content shall be either by the owner/operator's own testing or test reports from the fuel marketer. [R307-401]
- II.B.2 **Conditions on Diesel-Fuel Generators**
- II.B.2.a The sulfur content of any diesel fuel burned in any of the power generators shall not exceed 0.0015 percent by weight. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary. Certification of sulfur content shall be either by the owner/operator's own testing or test reports from the fuel marketer. [R307-401]
- II.B.3 **Conditions on the Backup Generator**
- II.B.3.a The 235 kW generator total hours of operation shall not exceed 4000 hours per rolling 12-month period. To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

NESHAP (Part 61), B: Radon From Underground Uranium Mines
MACT (Part 63), ZZZZ: Recipro. Int. Comb Engine (RICE)
NSPS (Part 60), IIII: Stationary Comp/Ignit R.I.C.E

PERMIT HISTORY

The final AO will be based on the following documents:

Is Derived From
Supersedes

Source submitted NOI dated September 30, 2008
DAQE-AN014010002-08 dated February 15, 2008

ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
ATT	Attainment Area
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds